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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
|-----------------|-------------|----------------------|---------------------|

09/445,710 03/13/00 LEINO

H 32107

000116  
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SUITE 1200  
CLEVELAND OH 44114-1484

IM62/0524

EXAMINER

|          |          |              |
|----------|----------|--------------|
| ALVIO, M | ART UNIT | PAPER NUMBER |
|----------|----------|--------------|

1731  
DATE MAILED:

05/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

|                              |                               |                              |
|------------------------------|-------------------------------|------------------------------|
| <b>Office Action Summary</b> | Application No.<br>09/445,710 | Applicant(s)<br>LEINO ET AL. |
|                              | Examiner<br>Steve Alvo        | Art Unit<br>1731             |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 March 2001.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- 15)  Notice of References Cited (PTO-892)
- 16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18)  Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19)  Notice of Informal Patent Application (PTO-152)
- 20)  Other: \_\_\_\_\_

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 10-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over OSTBERG et al ("Use of Carbon Dioxide In the Production of Sulphate Pulp").

See page 515, first paragraph for adding alkali, e.g. sodium hydroxide, to the pulp to adjust the temperature<sup>P 44</sup> in combination with carbon dioxide to buffer the pH to a pH of 8.0. See page 512, second paragraph for treating bleached or unbleached sulphate pulp. See page 509, middle of page for "CO<sub>2</sub> gas" dissolved. If the charge of alkali is not an aqueous solution of sodium hydroxide then such would have been obvious as aqueous solutions of sodium hydroxide are commonly used in the treatment of pulp to raise the pH. The term "intended to contain calcium carbonate filler" in claim 8, is not a positive limitation.

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Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over OSTBERG et al in view of G.B. Patent 815,527.

OSTBERG et al teaches adding alkali and carbon dioxide to counter each other's pH changing effect. See page 515, first paragraph for adding alkali, e.g. sodium hydroxide, to the pulp to adjust the temperature in combination with carbon dioxide to buffer the pH to a pH of 8.0. See page 512, second paragraph for treating bleached or unbleached sulphate pulp. See page 509, middle of page for "CO<sub>2</sub> gas" dissolved. It would have been obvious to that the alkali of OSTBERG et al could have been an aqueous solution of sodium hydroxide as such is taught by G.B. Patent 815,527. G.B. Patent 815,527 further teaches that the sodium hydroxide could be added prior to the carbon dioxide (page 2, lines 35-41). The term "intended to contain calcium carbonate filler" in claim 8, is not a positive limitation. Claim 9 is rejected as the use of pipes to add chemicals is well known in the papermaking art.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over OSTBERG et al with or without G.B. Patent 815,527 as applied to claim 1 above, and further in view of ADMITTED PRIOR ART (specification, page 1, lines 6-11).

The ADMITTED PRIOR ART teaches that it is known to neutralize (pH 7-8.5) the pulp before adding calcium carbonate as a filler. It would have been obvious to one of ordinary skill in the art that the neutralized pulp of OSTBERG et al and/or G.B. Patent 815,527 could have the calcium carbonate of the ADMITTED PRIOR ART added to it as it is at the proper pH for calcium carbonate filler.

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The argument that OSTBERG et al does not teach adding CO<sub>2</sub> in combination with alkali metal hydroxide is not convincing as OSTBERG et al teaches (pages 512-513) adding both CO<sub>2</sub> and sodium hydroxide (charge of alkali). Such addition of sodium hydroxide and CO<sub>2</sub> reads on the claimed “adding thereto a combination of an alkali metal hydroxide feed and a carbon dioxide feed”. The claimed feeds of (1) CO<sub>2</sub> and (2) alkali metal hydroxide do not define over the combination of feeds claimed by Applicant.

The argument that OSTBERG et al does not control the pH throughout the paper making is not convincing. The term “paper making” has not been defined. OSTBERG et al teaches buffering the various points in the paper making process. The instant “papermaking” reads on any of the paper making stages of OSTBERG et al. The instant paper making does not include all paper making stages, e.g. chipping wood into chips, and can read on any single paper making stage.

The argument that the present invention adds alkali metal hydroxide and a carbon dioxide regardless of the pulp suspension’s initial pH is not convincing as the claimed pH does not differ from the pH of OSTBERG et al. For example, claim 2 calls for adjusting the pH to a pH of 7 to 9. The buffering pH of 8 disclosed by OSTBERG et al is within the claimed 7 to 9. Applicant has not claimed or disclosed an initial pH that differs from the initial pH of OSTBERG et al.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is (703) 308-2048. The Examiner can normally be reached on Monday - Friday from 6:00 AM - 2:30 PM (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stanley Silverman, can be reached on 703-308-3837.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **(703) 308-0661**.

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STEVE ALVO  
PRIMARY EXAMINER  
ART UNIT 1731

MSA  
May 22, 2001